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A Force Management Update

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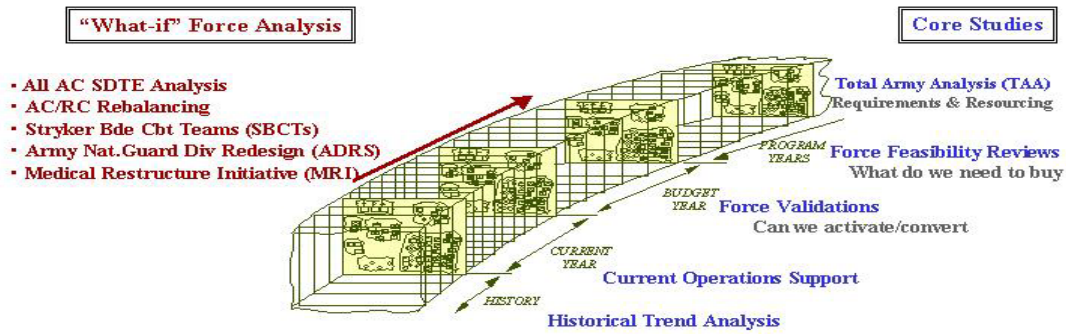
THE ARMY FLOW MODEL

The Army Flow Model (AFM) is an information support and predictive modeling system that enables the Army staff and Major Commands to rapidly assess force structure and policy decisions based on a fully integrated perspective rather than on a single functional or programmatic basis. Currently, AFM is the only system that provides these capabilities. Specifically, AFM provides the capability to identify and assess proposed equipment/personnel authorization changes and predict equipment availability/readiness for both programmed and "What If" force structures and/or scenarios. AFM also directly supports the Total Army Analysis (TAA), Force Validation Committee (FVC) reviews (units activating or converting in two years), and Force Feasibility Reviews (FFR) which assess TAA impacts. The AFM system consist of an integrated database linked to a web application for data retrieval and a set of predictive models.

AFM integrates data from standard Army databases (e.g. SAMAS, SACS, REQVAL, etc), notional force structures (IBCT, UA, UE, etc.) and AFM models that project equipment fill and equipment readiness into a synchronized database and then provides this data to the ARSTAF through an easy to use web-based system as part of Army Knowledge On-line's (AKO) Operational Community on both NIPRNET and SIPRNET. Minimal training is required to use the preprocessed data views in "Smart Books" while advanced users can use "Expert System" to develop customized queries. All data extracts are easily downloaded into MS Office applications.

The predictive modeling capabilities of AFM have been used extensively by the ARSTAF in determining the feasibility and affordability of the Army, Chief of Staff's directives and in validating current initiatives. AFM provides projected equipment shortfalls to G4 and new equipment costs to G8. As a separate, but related initiative, the AFM team developed the Equipment Distribution Scheduling Sub-system 2 (EDSS2) application for G8. This application improves the decision making process in the FVC's and FFR's by capturing accurate equipment distribution decisions made by the G8 Synchronization Staff Officers (SSO), facilitates package fielding concepts such as Unit Set Fielding, and enables the logical application of resource adjustments to procurement decisions. AFM also provides to the logistics community the HQDA Total Army Equipment Distribution Program (TAEDP) that provides equipment on-hand readiness calculations at the LIN and UIC level of detail.

How AFM Supports Transformation



ARMY FORCE STRUCTURE IN TRANSFORMATION

AFM has and continues to support the following studies and initiatives:

- **Army Transformation** – The Army Flow Model has taken the lead in providing detailed assessment of current and notional policy decisions impacting the transformation of the Army. AFM models, to include extensive "what-if" force structure modeling, have been used to assess: UA's (Units of Action), Stryker Brigades (SBCTS), Interim Brigade Combat Teams (IBCTs), Force XXI, Medical Restructuring Initiative, Army National Guard Division Redesign Study (ADRS/Mobile Light Brigade), and Army Prepositioned Stock Sets.
- **Total Army Analysis (TAA)** – The Army Flow Model provided complete analytical support to the TAA 6-11 process enabling analysts to resource future force structure requirements, assess the impacts of those decisions across the Army, and readily produce the ARSTRUC. AFM's Resource Allocation Model (RAM) was used to edit and set requirement priorities in the simultaneity stack and match programmed units to TAA requirements based on user match criteria. RAM is also the historical database of record for TAA transactions.
- **Quadrennial Defense Review (QDR)** – The Army Flow Model was the Army's lead analytical assessment tool during the Joint Chiefs of Staff J8 Dynamic Commitment War Games and provided complete analysis of data to the major issue panels. AFM provided direct support the Army staff during the Joint Chiefs of Staff Positive Match Exercise and is the Army's historical database of record for all QDR Dynamic Commitment and Positive Match Data. AFM will support the next QDR with analytical tools and expert analyses.
- **Force Feasibility Reviews (FFR)** – AFM provides equipment and personnel authorization comparisons, projected equipment availability/readiness and end item costs of future program decisions in the Program Objective Memorandum (POM) years.
- **Force Validation Committees (FVC)** – AFM provides complete equipment fielding (new and redistributed) feasibility analysis of near term force structure decisions (next two fiscal years).
- **Strategic Readiness System (SRS) Support –** AFM developed the data and algorithms for the G3 Force Management Division's SRS measures regarding force modernization and transformation. These measures are generated and refreshed monthly with direct input to the SRS database. AFM predictive equipment data is also used to support the predictive SRS.
- **Daily Analytical Assessments** – AFM data is used extensively in day-to-day operations in providing responses to queries from the Army Staff, Office of the Secretary of Defense (OSD), the Joint Staff (J-Staff), and Congressional inquiries.

To support the Army's rapid transformation to new units and new structures as well as its evolving rotation plans and dynamic priorities, the Army Flow Model team is developing a set of new rapid turn-around models to complement the current AFM set. These new models will form the core of an ARSTAF modeling "tool box" that enables quick formulation and evaluation of force structure concepts. Specifically, these models will enable the staff to:

- Replace current units with new designs and those that support brigades operations
- Group units in command structures such as brigades, task forces or fielding sets
- Recommend CSS structure (unit types) for Small Scale Contingencies (SSC)
- Model Unit Rotation policies and evaluate current plans
- Evaluate proposed structure against time-phased war fight requirements
- Set dynamic priorities that reflect war fight and rotation plans
- Evaluate equipment readiness over time given dynamic priorities and procurements

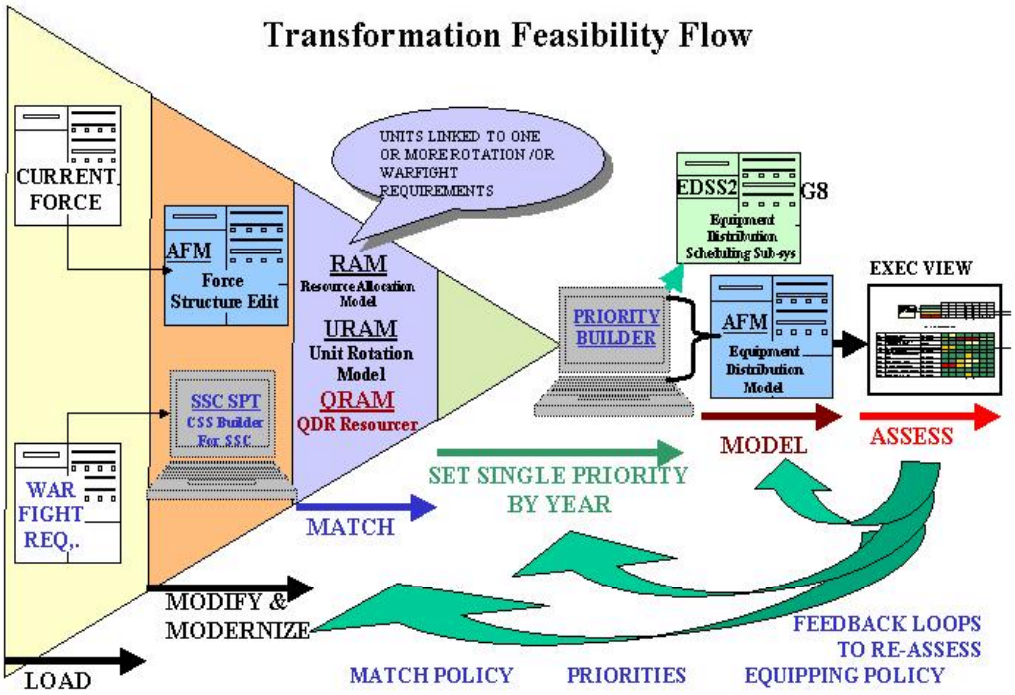
The following models are ready for use:

- **Unit Rotation Model (URAM)** matches available forces against persistent rotational requirements over an extended time period to assess brigade task force and individual unit rotational policies, determine unit shortfalls by type and generate a unit rotation plan.
- **Small Scale Contingency (SSC) Logistics Support Model** rapidly generates the "logistics tail" for SSC's using actual and notional units and updated allocation rules.
- **Priority Builder** enables users to group units for match and rotation studies and then use output from these models to assist them in setting unit priorities for each year of the POM.

Generating Force (TDA) allows panel members to modify TDA requirements and authorization via this web application. This application can be accessed through AFM web site (**https://afm.us.army.mil**). The end result will be in Schedule 8 format.

The following model is currently under development:

- **Force Structure Edit Model (FSE)** will be a web-based system enabling users to create, stores and display notional force structures. Using these notional structures, AFM will then assess authorization changes and equipment fielding/ readiness impacts.



These new models will be run at the staff officers' sites either over the Internet or as stand-alone models. All will have user-friendly interfaces to set criteria or load data, as required, and are designed to usually complete a full analytical run within one hour. These models will be fielded over the next two fiscal years with URAM being the first in May 2004.

-- Joe Albert

Reserve Component (RC) Items of Special Interest

National Defense Authorization Act FY 05

Eliminated the 180-day strength accounting rule - Title 10 USC section 115 requires Reserve Component soldiers on active duty for more than 180 days to be counted against Active Component (AC) end strength, unless otherwise excluded [see 10 USC 115 (d)(1) through (d)(11)]. The National Defense Authorization Act for FY 2005 contains a provision establishing the requirement for an annual congressional authorization of the maximum number of Reserve Component personnel to be on active duty or full-time National Guard duty providing operational support. The provision eliminates the current 180-day strength accounting rule requiring all reservists on active duty beyond that limit to count against AC end strength. In lieu of the 180 accounting rule, the provision authorizes RC soldiers voluntarily on active duty to serve up to three years, or a cumulative three years during a four year period, before counting against AC end strength. The intent of the flexible accounting provision is to encourage volunteer utilization, not only during emergency periods, but during peacetime as well.

Modified 10 USC 10102, "Purpose of reserve components" - Title 10 USC section 10102 sets forth the purpose of the Reserve Components. The National Defense Authorization Act for FY 2005 amended section 10102 by eliminating the statutory reference to planned mobilizations (see the code section below). The statute was amended to more accurately reflect the operational mission, responsibilities, and contributions of the Reserve Components and the manner in which they will be employed in the future.

USC Title 10
§ 10102. Purpose of reserve components
The purpose of each reserve component is to provide trained units and qualified persons available for active duty in the armed forces, in time of war or national emergency, and at such other times as the national security may require, to fill the needs of the armed forces whenever [, during and after the period needed to procure and train additional units and qualified persons to achieve the planned mobilization,] more units and persons are needed than are in the regular components.

Amended Title 32 USC adding a new chapter - The National Defense Authorization Act for FY 2005 added CHAPTER 9 – HOMELAND DEFENSE ACTIVITIES to Title 32 United States Code. Chapter 9 defines homeland defense activity as an activity undertaken for the military protection of the territory or domestic population of the United States, or of infrastructure or other assets of the United States determined by the Secretary of Defense as being critical to national security, from a threat or aggression against the United States. The chapter authorizes the Secretary of Defense to provide funds to a governor of a State (defined as each of the several States, the District of Columbia, the Commonwealth of Puerto Rico, or a territory or possession of the United States) to employ National Guard units or members to conduct homeland defense activities. Under the new legislation, National Guard personnel could perform homeland defense activities for up to 180 days which could be extended for an additional 90 days to meet extraordinary circumstances. A conforming amendment to section 115 of Title 10 excludes persons involuntarily performing homeland defense activities from counting against full-time National Guard authorized end strength.

Repealed exclusion of active duty for training from call-up authority -The National Defense Authorization Act for FY 2005 authorizes the involuntary mobilization of Reserve Component units and members for training. The intent of the legislative change is to provide the Department of Defense with improved access to RC personnel during war or national emergency for the purpose of individual or collective training necessary to meet deployment standards and timelines for emergent missions or contingencies. It provides the statutory framework for a flexible "train, mobilize, and deploy" posture for the Reserve Components. The time spent in training is counted against the mobilization timelines established in law.

Changed Army program assigning AC advisers to RC units -The National Defense Authorization Act for FY 2005 reduced the minimum number of Army Active Component advisers required to be assigned to support training and readiness of Selected Reserve units from 5000 to 3500. However, the reduction is not to be implemented until the Secretary of the Army submits to the Congress a report (with a no later than suspense date of 31 March 2005) on the AC advisers to RC units program. The report is required to address the following points: 1.) The impact the adviser reduction will have on the Army's ability to improve training and readiness of RC units, 2.) The adequacy of 3,500 AC advisers considering emerging RC training requirements associated with transformation and operational missions, 3.) The Army's redistribution efforts and their effectiveness realigning the 3,500 AC advisers to higher priority units as well as the Army's intention to expand the use of reservists on active duty to satisfy RC training needs, 4.) Whether or not the Army intends to further reduce the number of AC advisers and, if so, the scope and justification for the reduction, and 5.) Whether an increase in RC full-time support personnel will be required to replace the loss of AC advisers.

Army End Strength (ES) National Defense Authorization Act FY 2005

Authorized Active Army ES as of Sept 30, 2005 is 502,400. This ES is subject to the condition that costs of active duty personnel in excess of 482,400 shall be paid from funds authorized to be appropriated for contingent or supplemental appropriations for FY 2005.

The National Defense Authorization Act for FY 2005 revised the permanent active duty end strength minimum levels. Section 691(b) of title 10 USC was amended to increase Army ES to 502,400. This adjustment requires that at the end of fiscal year 2005 the Army's ES shall not be less than 502,400.

The National Defense Authorization Act for FY 2005 authorizes an increase in Army ES during FY 2005 through FY 2009 by up to 30,000 above the levels authorized in the National Defense Authorization Act for FY 2004 as necessary to achieve transformational reorganization objectives including objectives for increased numbers of combat brigades, unit manning, force stabilization, and shaping and rebalancing of Active and Reserve Component forces. If this authority is utilized the budget for the Department of Defense (DoD) shall specify the amounts necessary for funding the active duty ES of the Army above 482,400. Should the DoD budget for FY 2006 include amounts necessary for funding an active Army ES above 482,400, the following additional information shall be provided: 1.) Amount to be funded out of the proposed DoD budget other than out of amounts for Army. 2.) Amount to be funded out of amounts proposed for Army. 3.) Estimated amounts to be funded out of emergency reserve funds and supplemental appropriations for FY 2006. 4.) Detailed justification for reliance on each funding source in 1 through 3 above. 5.) Detailed discussion of Army programs and plans funded in the proposed budget for FY 2006 that must be modified if the funding sources relied on must be changed and, 6.) Projected Army active duty ES for each fiscal year 2006 – 2010 together with a detailed enumeration of the component costs of the projected ES for each fiscal year.

-- John Walsh